

A note on artificial nesting sites.—A method of providing nesting sites for the European Little Ringed Plover (*Charadrius dubius*), Common Tern (*Sterna hirundo*) and Common Gull (*Larus canus*) is described in *Deutschen Bund fuer Vogelschutz*, vol 70: 17-19.

I decided to apply this idea under local conditions in a much smaller way on a dam situation 160 km south of Perth.

There is very little cover around the dam edges. Only a few clumps of *Juncus* and a patch of *Typha*, not more than 3 x 6 metres, are present.

A raft was constructed out of an old pinewood pallet. To increase buoyancy a number of plastic bottles were fastened underneath. The raft is only 1 sq. m. It was launched and anchored well offshore. To improve its appearance *Typha* was woven into the pallet strips. However, it soon weathered away but darkened and stained the wood sufficiently.

During the ensuing months the raft was frequently used as a loafing area by Black Ducks as well as Little Pied Cormorants.

In spring 1978 two Little Grebes appeared, stayed at the dam, but nested, however, in the nearby *Typha* and successfully reared one young.

Grass and some sedges began to grow on the artificial island, and again in spring 1979 the Little Grebes appeared.

On September 7, 1979, the birds were observed copulating on the raft, and tended to drive Black Ducks away from it. Eventually a fair mound of mud and vegetable matter was gathered to form a nest of about 30 cm in diameter about 8 cm high, with a depression in the middle. The nest contained three eggs on October 20. A bird was still brooding on October 28. Another visit to the dam on November 10 showed the two parent birds plus three very small chicks, sometimes hitching a ride on the mother's back. But they appeared to be able already to dive for a few seconds at a time. On the next visit, November 14 and 18 a reduction in numbers was evident. Only two juveniles could be observed. During the following two weeks another juvenile disappeared. On December 2 the only remaining young was almost the size of its parents, but paler in colour, mainly greyish on the body and having a very pronounced striped head.

Other attempts at providing nesting platforms for raptors and nesting cavities or boxes for birds being liable to breed in hollows have proved so far a failure.

—OTTO MUELLER, 7 Hamer Avenue, Wembley Downs.

Notes on the Breeding of Sacred Kingfishers.—On November 8, 1979 during a wind storm at Scabrook 6 km south-east of Northam a small limb was broken off a York Gum, *Encalyptus loxophleba*, leaving a hole in the trunk. The tree is only 21 m from my house and during the next few days a pair of Sacred Kingfishers (*Halcyon sancta*), were seen around the tree. On 13th and 14th they were flying in and out of the hole and courtship feeding had started. Copulation was observed on the 17th and also on the 19th and courtship feeding, mainly with grasshoppers and small skinks, continued. The female seemed to remain quietly perched in the tree waiting for food to be brought to her. Incubation commenced on either the 26th or 27th with 4 eggs having been laid. The hole in the tree trunk is 5 cm in diameter and 2.74 m from the ground, with the centre of the nest chamber 13 cm in from the outer opening and 5 cm below the opening. Both male and female birds took turns at incubating the eggs. On December 14 the eggs had hatched so the incubation time would be 16 or possibly 17 days. Both parents fed the young in the nest with mainly small skinks, grasshoppers, what appeared to be spiders and on one occasion a centipede about 10 cm long. On December 28, while watching through binoculars, I was interested to see one of the adults bring in a small snake approximately 35 cm long. After placing it at the edge of the hole with most of it hanging down outside, the bird flew off and the snake was drawn into the nest apparently by one of the young. The first three fledglings left the nest on January 9, 1980 but the fourth

remained in the nest until the following morning; so the nestling period was 27 days. They stayed in the area for only 3 or 4 days during which time the young ones were flying freely.

—A. L. MILHINCH, Northam.

Crested Hawks at Mitchell Plateau.—On February 19, 1980, while acting as a guide on a botanical research trip at Mitchell Plateau in the north-west Kimberley (Lat. 14° 47' S., Long. 125° 48' E.) I saw a group of three Crested Hawks (*Aviceda subcristata*). They were 26 km north of the AMAX base camp. The birds were disturbed from a roadside tree (*Eucalyptus nesophila*). They first flew in circles some 20 m above ground level, then two of the birds did the tumbling act peculiar to this species. Time did not allow observation for long and when last seen the birds were still circling above the same group of trees.

This is only the fourth known sighting of the Crested Hawk at the Mitchell Plateau—the present sighting and on two other occasions last “Wet” (November 1978 and February 1979) by myself and once by Mrs. H. B. Gill in July 1973.

—J. A. SMITH, Maylands.

OBITUARY

A. G. MATHEWS, 1907-1978

Arthur Greenwood Mathews, an Honorary Life Member of this Club and son of our third President, Wallace H. Mathews, died suddenly of heart failure at the Royal Perth Hospital on December 14, 1978. He was born at Tammin on January 23, 1907 but spent most of his early youth in South Perth, where his parents came to live. Throughout life he was, like them, a devoted Christian, whose tenets he observed rigidly. However his good-natured tolerance enabled him to gain the friendship of all manner of men and he was universally regarded as a good companion. As a bush naturalist, trained by his father, he was always zestful and competent and his services were often availed of by professional parties.

After leaving school, the Forrest Street State School, he trained as a book-keeper and worked at the United Press Ltd. (R. S. Sampson) and with Flower Davies & Johnson and Mortlocks—in the days when the weekly pay envelope included gold sovereigns. I first met Arthur in 1924 at his parents' home when we were starting the Naturalists' Club; Arthur used to help his father collect the spectacular spoon-winged lacewing, *Chasmodon huttoni*, when it could be taken in numbers, but only for a brief period in December and in a particular South Perth street. See his father's article on the species in the *Western Australian Naturalist*, 1 (2), 1947: 42-44. I was on the literary staff of the United Press then, when Arthur joined us on the commercial side. At the time Arthur's absorbing hobby was not natural history but amateur radio. He communicated with stations overseas. When he was first able to receive the American short wave station at Sehenectady I wrote up his triumph as one of my first literary contributions to *The West Australian*! In later years radio, in one way or another, was always part of Arthur's life.

Ultimately his religious convictions impelled him to forsake commerce for the missionary field. After his marriage with Helen Gwendolyn King he joined the United Aborigines Mission at Badjeling in January 1931. Then he served at Mt. Margaret. There Helen taught at the school and reared two notable Aboriginal children, Ben Mason and May Miller.

In 1933 Arthur and Helen moved on to the Warburton Ranges, which became their principal area of missionary activity. Arthur helped found the Warburton Mission and at the outset actually walked all the way there from Laverton. He served at this mission for several years and